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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,749	02/09/2001	JianWei Bei	079257/0103	5875

24319 7590 10/28/2004

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EXAMINER	
RAMAKRISHNAIAH, MELUR	
ART UNIT	**PAPER NUMBER**
2643	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/779,749	BEI ET AL.	
	Examiner	Art Unit	
	Melur Ramakrishnaiah	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5-10* is/are allowed.

6)☒ Claim(s) *1-4,11,13,15-17,19-21,23-25,27 and 28* is/are rejected.

7)☒ Claim(s) *12,14,18,22 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 11, are rejected under 35 U.S.C 102(e) as being anticipated by Schuster et al. (US PAT: 6,483,600 B1, filed 2-26-1999, hereinafter Schuster).

Regarding claim 1, Schuster discloses a method of fax transmission over a fax relay network that includes at least an analog portion and a digital portion of the fax relay network, the method comprising: receiving, at a a first relay gateway (30, fig. 1) that communicatively connects a sending fax machine (20, fig. 1) to the digital portion (32, fig. 1) of the fax relay network, the image data from a the sending fax machine, converting the image data into digital data to be sent over a digital portion of the fax relay network (col. 7 lines 6-57), storing the digitized image data in a buffer (142, fig. 4) at the first relay gateway , outputting the digitized image data in accordance with data rate of the digital portion of the fax relay network (col. 7 lines 24-33, lines 52-54, col. 16 lines 35-45), the digitized image data being received by a second relay gateway (70, fig. 1) communicatively connecting a receiving fax machine to the digital portion of the fax relay network (52, fig. 1).

Regarding claim 11, Schuster discloses a method of fax transmission over a fax relay network that includes at least an analog portion and a digital portion of the fax relay network, the method comprising: receiving, at a first relay data gateway (30, fig. 1) that communicatively connects the sending fax machine (20, fig. 1) to the digital portion (32, fig. 1) of the fax relay network, the image data from the sending fax machine, converting the image data into digital data to be sent over the digital portion of the fax relay network (col. 7 lines 6-57),storing the digitized image data in a buffer (142, fig. 4) at the first relay data gateway, outputting the digitized image data in accordance with data rate of the digital portion fax relay network, the image data being received by a second relay gateway (70, fig. 1) on a digital portion of the fax relay network (col. 7 lines 24-33, lines 52-54, col. 16 lines 35-45), the second relay data gateway communicatively connecting the receiving fax machine (80, fig. 1) to the digital portion (52, fig. 1) of the fax relay network (fig. 1), determining whether a frame of the digitized image data contains errors, if the determining step is that the frame of digitized image data contains errors, sending a data resend signal to the first relay gateway, and providing the frame of digitized image data to the second relay data gateway from one of the first relay data gateway and the sending fax machine (col. 14 lines 28-36).

Regarding claims 2-3, Schuster further teaches the following: the sending fax machine (20, fig. 1) is communicatively connected to a first public switched telephone network (22, fig. 1), the first public switched telephone network (22, fig. 1) communicatively connecting the sending fax machine with first relay data gateway (30, fig. 1), wherein the receiving fax machine (80, fig. 1) is communicatively connected to a

second public switched telephone network (72, fig. 1), the second public switched telephone network communicatively connecting the receiving fax machine with the second relay data gateway (70, fig. 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster in view of Honda (JP406152513A).

Schuster differs from claim 4 in that although he teaches converting the fax data into digital signal at the sending gateway (30, fig. 1 col. 7 lines 51-53) and reversing it at the receiving gateway (70,col. 10 lines 40-46); he does not explicitly teach that data is pulse-code-modulated format.

However, Honda discloses system data registering method for radio telephone system which teaches the following: data is pulse-code-modulated format and converting it (fig. 1, see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Schster's system to provide for the following: data is pulse-code-modulated format as this arrangement would provide well known data format to be used in communication systems as taught by Honda.

5. Claims 17, 19, 25, and 27, are rejected under 35 U.S.C 102(e) as being anticipated by Livshin (US PAT: 6,501,790 B1, filed 7-9-1999).

Regarding claims 17 and 25, Livshin discloses an apparatus for facilitating fax transmission between a sending fax machine and receiving a fax machine over a fax relay network, the fax relay network including at least a first network portion and a second network portion, the apparatus comprising: an input port in (122, fig. 3) for receiving image sent from the sending fax machine, a storing unit (131, fig. 3) that stores the image data and outputs a signal indicative of a particular amount of data currently stored in the storing unit (see fig. 4), and a control unit (134, fig. 3) for controlling output of image data stored in the storing unit in accordance with a data rate of the second network portion of the fax relay network and signal output from by the storing unit (figs. 2-4, col. 6 lines 24-52).

Regarding claims 19 and 27, Livshin further teaches the following: the sending fax machine (12, fig. 2) is communicatively connected to a first public switched telephone network (16, fig. 2), the first public switched telephone network communicatively connecting the sending fax machine with the apparatus (figs. 1-2, col. 5 lines 48-50).

6. Claims 20 and 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Livshin in view of Honda.

Livshin differs from claims 20 and 28 in that although he implicitly teaches converting the fax data into digital signal at the sending gateway (20/120, figs. 1-2, col.

1lines 34-45) and reversing it at the receiving gateway (22/122, figs. 1-2); he does not explicitly teach that data is pulse-code-modulated format.

However, Honda discloses system data registering method for radio telephone system which teaches the following: data is pulse-code-modulated format and converting it (fig. 1, see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Livshin 's system to provide for the following: data is pulse-code-modulated format as this arrangement would provide well known data format to be used in communication systems as taught by Honda.

7. Claims 13, 15, 21, 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Livshin in view of Schuster.

Regarding claims 13 and 21, Livshin discloses an apparatus for facilitating fax transmission between a sending fax machine and a receiving fax machine over a fax relay network, the fax relay network including at least a first network portion and a second network portion, the apparatus comprising: input port in (122, fig. 3) for receiving image data from the sending fax machine (12, figs. 1-2), a storing unit (131, fig. 3) that stores the stores the image data and outputs a signal indicative of a particular amount of data currently stored in the storing unit (see fig. 4), and a control unit (134, fig. 3) for controlling output of the image data stored in the storing unit in accordance with a data rate of the network fax relay network and signal output by the storing unit (figs. 2-4, col. 6 lines 24-52).

Livshin differs from claims 13 and 21 in that he does not teach the following: controlling the output of the digitized image data in accordance with a data rate of the digital portion of the fax relay network.

However, Schuster teaches the following: controlling the output of the digitized image data in accordance with a data rate of the digital portion of the fax relay network (col. 7 lines 24-33, lines 52-54).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Livshin 's system to provide for the following: controlling the output of the digitized image data in accordance with a data rate of the digital portion of the fax relay network as this arrangement would facilitate transmitting data more efficiently, while using the available bandwidth as taught by Schuster.

Regarding claims 15 and 23, Livshin further teaches the following: the sending fax machine (12, figs. 1-2) is communicatively connected to a first public switched telephone network (16), the first public switched telephone network communicatively connecting the sending fax machine with the apparatus (figs. 1-2, col. 5 lines 48-50).

8. Claims 16 and 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Livshin in view of Schuster as applied to claims 15 and 23 above, and further in view of Honda.

The combination differs from claims 20 and 28 in that although it implicitly teaches converting the fax data into digital signal at the sending gateway (20/120, figs. 1-2, col. 1lines 34-45 of '790) and reversing it at the receiving gateway (22/122, figs. 1-2 of '790); he does not explicitly teach that data is pulse-code-modulated format.

However, Honda discloses system data registering method for radio telephone system which teaches the following: data is pulse-code-modulated format and converting it (fig. 1, see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: data is pulse-code-modulated format as this arrangement would provide well known data format to be used in communication systems as taught by Honda.

9. Claims 5-10 are allowed.

10. Claims 12, 14, 18, 22, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (703) 305-1461. The examiner can normally be reached on M-F 6:30-4:00; every other F Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703)305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melur Ramakrishnaiah
Primary Examiner
Art Unit 2643